

## FINDING OF NO SIGNIFICANT IMPACT

## Pacheco Water District Lateral 3 Canal Lining Project

#### **FONSI 12-06-MP**

Recommended by:			
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Concurred by:			
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Approved by:			
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# **Background**

Reclamation proposes to provide a Department of the Interior (DOI) CALFED Bay-Delta Program grant to the Pacheco Water District (PWD) to support implementation of the Proposed Action. The CALFED Bay-Delta Program is a 30-year Program (2000-2030) among 25 federal and state agencies with responsibility in the Sacramento San Joaquin Delta (Delta). The Program is based on four major resource management objectives that guide its actions to achieving a Delta that has a healthy ecosystem and can supply Californians with a reliable water supply. Those objectives are levee system integrity, water quality, water supply reliability and ecosystem restoration. Reclamation plays a key role as the federal lead agency for implementation of water supply reliability actions in coordination with our state CALFED partner agencies.

PWD, which encompasses approximately 5,000 acres of productive farmland, is located approximately 10 miles southwest of the community of Dos Palos, California. PWD lies within the Grassland Drainage Area (GDA) and is a participating agency in the Grassland Bypass Project (GBP), through which, subsurface drain water generated within the region is discharged to the San Joaquin River. Most of the GDA is underlain with a saline perched water table, which is managed with on-farm tile systems and regional deep drains. Deep percolation from irrigation and seepage from unlined canal systems is collected by the tile systems and regional drains, where it is managed and eventually discharged to the San Joaquin River.

Approximately 3,000 acres of the PWD includes subsurface tile drainage systems to manage the perched groundwater and maintain viable agricultural productivity. Tile systems within the PWD contribute an average of 4,000 acre feet of saline subsurface drain water to the GBP annually. This drainage is highly mineralized and contains high levels of dissolved salts, boron, and selenium. The PWD is included in the Westside Regional Drainage Plan, which states the need for source control actions (such as canal lining and irrigation improvements) which provide solutions to reducing drainage discharges from the GDA to the San Joaquin River. The goal ultimately is for all agricultural drainage produced within the GDA to be managed internally resulting in elimination of all discharge. The Proposed Action would reduce approximately 400 acre feet of seepage into the drainage system annually.

## **Alternatives Including Proposed Action**

### No Action Alternative

The No Action Alternative would consist of Reclamation not providing grant funding to facilitate water conservation measures at the PWD. Currently the PWD is unable to provide funding to implement this Proposed Action. Therefore, under the No Action Alternative seepage from the unlined Lateral 3 Canal would continue.

The GBP operates under a Waste Discharge permit which regulates the load of selenium that can be released by the PWD. The allocated amount of selenium that the PWD is allowed to discharge is reduced on a yearly basis. Without implementation of drainage control actions, such as the

Proposed Action, within the PWD the future load allocations would not meet required state and/or federal compliance standards. Under the No Action Alternative, current water losses through seepage and the PWD's contribution to subsurface drainage to the GDA from the Lateral 3 canal would continue.

## Proposed action

The Proposed Action consists of lining three miles of existing earthen channel with an EPDM liner (waterproof flexible liner) to reduce seepage from the PWD's Lateral 3 canal. In addition to the proposed canal lining, new weir boxes and discharge pipes would replace the existing check structures to assure efficient operation of the facilities. New turnout and check structures would be added as well. All associated construction activities would occur on existing facilities which are surrounded by irrigated agricultural land.

#### **Construction Activities would include:**

- <u>Site preparation:</u> A licensed surveyor would survey the project alignment, develop topographic data for design, and set construction stakes. The existing canal alignment would be dewatered and cleaned of accumulated silt and debris. Existing check structures and turnouts would be removed to allow for placement of the lining. One to three excavators would be used to perform this work and a dump truck would be used to haul removed features from the site.
- <u>Facility Replacement:</u> Precast concrete weir boxes, culverts and canal gate structures would be placed as appropriate. Concrete aprons would be placed around the new facilities so that the liner can be properly anchored.
- <u>Ground Disturbance:</u> The existing channel would be graded to the final design elevations. Anchor trenches (approximately two feet deep and two feet wide) would be cut on either side of the canal.
- Turnout and Check Structure Removal/Replacement: Five existing turnouts would be removed and replaced along the channel, and one new turnout will be added. Two existing check structures would be removed completely. One check structure would be replaced with new precast weir boxes and discharge pipelines, and Check #5 would be removed and relocated to STA. 126+00. Two new check structures with the updated infrastructure would be added.
- <u>Liner Placement:</u> The flexible liner would be placed over the existing canal, with both edges rolled into the anchor trenches on either side. The trenches would be backfilled with the previously excavated material. The liner would be anchored to concrete aprons at each of the turnout and check structures with stainless steel batten strips.
- Post Project Seepage Study: A segment of the canal proposed to be lined would be
  isolated and filled with water to the normal operating level in order to verify project
  results. Losses from evaporation, precipitation, and seepage would be measured for 7 to
  10 days and compared to the pre-project seepage study. The net difference between the

two studies would result in the approximate amount of seepage reduction from the implementation of the Proposed Action.

Construction would begin in October of 2012 and would be completed by December 2012. The post-project seepage study would be conducted and a final report completed by February 2013. The staging area and access route would be restored to pre-project conditions. Avoidance and/or minimization measures developed for the biological resources within the Proposed Action area would be implemented by the PWD.

# **Findings**

Based on the attached EA, Reclamation finds that the Proposed Action is not a major Federal action that will significantly affect the quality of the human environment. The attached EA describes the existing environmental resources in the Proposed Action area, evaluates the effects of the No Action and Proposed Action alternatives on the resources, and proposes measures to avoid, minimize, or mitigate any adverse effects. This EA was prepared in accordance with NEPA, Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508), and DOI Regulations (43 CFR Part 46). Effects on several environmental resources were examined and found to be absent or minor. This analysis is provided in the attached EA, and the analysis in the EA is hereby incorporated by reference.

#### Cultural Resources

The Proposed Action does not involve the types of activities that have the potential to affect historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1). Land use would remain unchanged and no new construction or new ground disturbing activities will take place.

#### Indian Trust Assets

There are no Indian reservations, Rancherias or allotments in the project area. The proposed action does not have a potential to affect ITAs. The nearest ITA is a Public Domain Allotment approximately 60 miles northeast of the Proposed Action area.

#### **Indian Sacred Sites**

There are no identified Indian Sacred Sites within the action area of the proposed project and therefore this project would not inhibit use or access to any Indian Sacred Sites.

#### Environmental Justice

No significant changes in agricultural communities or practices would result from the Proposed Action, other than potential changes to individual irrigation systems. These changes are not likely to affect agricultural employment, which employs a higher proportion of low-income and minority workers than are employed in the general workforce. Accordingly, the Proposed Action

would not have any significant or disproportionately negative impact on low-income or minority individuals within the project area.

## **Endangered Species Considerations**

On May 2, 2012, a species list of federally listed, proposed and candidate species potentially occurring within the Proposed Action area and surrounding areas was obtained from the U.S. Fish and Wildlife's (Service) website. The only listed species that may be affected by the proposed action is the San Joaquin Kit Fox, if an individual used the canal as a migratory corridor during construction. Therefore, the following avoidance and minimization measures will be followed to avoid adverse affects.

All project-related vehicle traffic will be restricted to established roads, construction areas, and other designated areas. In order to reduce impacts by project-related vehicles, workers will observe the following:

- Maintain a daytime speed of 20-mph throughout the site.
- Minimize construction to the extent possible at night and when kit foxes would be most active.

Inadvertent entrapment will be prevented via the following activities:

- Cover all excavated, steep-walled holes or trenches more than 2-feet deep with plywood or similar materials at the close of each working day.
- Construct one or more escape ramps of earthen-fill or wooden planks if the trenches cannot be closed.
- Thoroughly inspect all construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site overnight before the pipe is subsequently buried, capped or otherwise used in any way.
- All food-related trash items will be disposed of in securely closed containers and removed at least once a week from the project site.

An employee education program will be conducted by a qualified biologist consisting of a brief presentation in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and agency personnel involved in the project. The program will include a description of the San Joaquin kit fox and its habitat needs, an explanation of the status of the species and its protection under the Endangered Species Act, and a list of measures being implemented to avoid and minimize the chance of impacts to the species during project construction and implementation. A fact sheet conveying this information will be provided to project personnel.

With implementation of the previously described avoidance and minimization measures for the San Joaquin kit fox, Reclamation has determined that the Proposed Action may affect, but is not likely to adversely affect the San Joaquin kit fox. Reclamation will send a memo to the Service requesting concurrence with this determination.